

CLAIMS

What is claimed is:

1. A method of associating a compound with a sensor surface, said method comprising:

coating at least a part of a surface of a sensor with a hydrophobin-like substance; and
contacting the hydrophobin-like substance with the compound to form a non-covalent bond between the hydrophobin-like substance and the compound.

2. The method according to claim 1, wherein the compound is smaller than about 15000 daltons.

3. The method according to claim 1, wherein the compound is smaller than about 2000 daltons.

4. The method according to claim 2 or 3, wherein the compound is incorporated in the hydrophobin-like substance.

5. The method according to any one of claims 1 to 3, wherein the compound is an electroactive compound.

6. The method according to any one of claims 1 to 3, wherein the compound is capable of being converted into an electroactive compound.

7. The method according to claim 1, wherein the compound is larger than about 15000 daltons.

8. The method according to claim 1, wherein the compound comprises a proteinaceous substance.

9. The method according to claim 7 or 8, wherein the compound comprises an enzyme.

10. The method according to claim 7 or 8, wherein the compound comprises an antibody.

11. The method according to claim 7 or 8, wherein the compound comprises a receptor.

12. The method according to any one of claims 1 to 11, wherein the compound is at least partly hydrophobic or comprises a hydrophobic anchor.

13. The method according to any one of claims 1 to 12, further comprising covalently binding a second compound to the hydrophobin-like substance.

14. The method according to any one of claims 1 to 12, further comprising: non-covalently binding a second compound to the hydrophobin-like substance through a third compound;

wherein the third compound comprises an intermediate compound having an affinity for the second compound.

15. A sensor, comprising:
a surface; and
a coating comprising a hydrophobin-like substance and a compound non-covalently bound to the hydrophobin-like substance;
wherein the coating covers at least part of the surface.

16. The sensor of claim 15, wherein the compound is smaller than about 15000 daltons.

17. The sensor of claim 15, wherein the compound is larger than about 15000 daltons.
18. The sensor of claim 15, wherein the compound is a proteinaceous substance.
19. The sensor of any one of claims 15 to 18, further comprising an electrode.
20. The sensor of claim 19, wherein the electrode is selected from the group consisting of a glassy-carbon electrode, a glass electrode and a Thin Mercury Film Electrode.
21. The sensor of any one of claims 15 to 20, further comprising an electroactive compound.
22. A method for determining a voltage difference in a solution, the method comprising:
contacting the solution with the sensor of any one of claims 19 to 21; and
recording a current.